



Automated Information Processing NEWSLETTER

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Automated Information Processing Facts for Alberta Agriculture Staff

TRENDS AND EVENTS

AS/400 UPDATE

 or those of you who haven't noticed any improvements in the performance of the AS/400, perception is reality. The 1991/92 budget was developed with upgrade of all the installed systems in mind but we've run into a problem with providing those upgrades.

On April 22nd IBM announced new AS/400 models with a new operating system, performance improvements of 30 to 50% and other features such as optical storage capability. That's the good news! The other side is that we can't take advantage of the improvements until some contract issues are resolved. This means that we are about 2 to 3 months behind our plan.

The FAX and IMAGE projects are still on target and we now have an agreed pilot project partner in the form of the Finance & Administration Division. The IMAGE system will be first applied to the Financial Policies & Procedures manual for update & maintenance as well as getting us onto the learning curve. Other aspects of F&A such as Accounts Payable & Records Management will also be included. Just in case no one has explained the technicalities a FAX document is an IMAGE therefore the two technologies will be brought together in this pilot.

We have had a number of enquiries into the remote access to the AS/400 from people who can't leave the office behind. Well, it's available to the J.G. O'Donoghue building AS/400 as of June 1991. For a copy of the requirements and procedure contact our office. The plan is

to make it available to all workaholics by dialing into the nearest Agriculture AS/400 installation. Best guess right now would be late July early August.

I did say something about Word Processing in the last issue, as much as I hate to admit it, therefore you deserve an update. Systems Development now has their hands on a certain package and are getting our feet wet with respect to its capabilities. A memorandum to a select distribution will be going out shortly to identify participants in the evaluation. So far it looks good and does lots.

Just an Aside

In May Alan Hall and I went on a little trip to see how things are done south of the border. Would you believe the U. S. Department of Agriculture installed 3,000 midrange systems with 15,000 terminals in less than two years... It's amazing what a big bucket of money and a lot of staff can accomplish.

We also took a trip to Rochester Minnesota (home of the IBM AS/400) to be briefed on some AS/400 developments. The future development plans are impressive but quite frankly we are still trying to absorb the demonstrations of the products available to us today. RICK OSTROWSKI (OSTROWS AGEDM)

AS/400 DEVELOPMENT STATUS



Since the last issue, development staff have spent a significant

amount of time researching and evaluating ways to improve and speed up the development process for AS/400 systems. What are being looked at are Computer Assisted Software Engineering (CASE) tools and Fourth Generation Programming Languages (4GL).

CASE tools are packages which allow developers to produce screen formats, system programs and documentation directly onto the computer by, generally, using a series of menus. By following menu prompts developers instruct the CASE tool system to generate much of the code required for a particular system. The developer is then only required to tailor that code and write only a minimum of code to integrate the generated programs into a single system.

4GL also speed up system development by reducing the number of written statements required to generate machine instructions. When computers were first used developers were required to write each single instruction that a machine would carry out. As systems grew and became more complex it was realized that it would be impossible for a developer to write down each of the millions of single instructions required and to complete the task before both the developer and the users died of old age. This led to the development of Assembly or Second Generation Languages, these produced several machine instructions for each written statement but, because they were written in a computer shorthand they were difficult to learn and understand. This led to the

Please forward any questions, contributions or suggestions to Terry Lister, Systems Development Division. By Phone at 427-2101 or, through E-Mail address LISTER AGEDM.

development of Third Generation Languages. These used English like statements such as "If ... then do..." and increased the number of machine instructions for each written statement. Third Generation Languages such as COBOL are still widely used today and because they are comparatively easy to learn will continue to be used for some time to come. Fourth Generation Languages continue the trend of more machine instructions per written statement using single word commands to perform tasks requiring several Third generation language statements.

Not all the development staff's time has been spent on evaluation however work still continues to enhance and expand the Animal Health Information System and the Marketing Information System.

A system for tracking and controlling the Minister's and Associate Minister's Action Requests has been developed for the Special Projects Section of Information Services and has just gone into production.

Work has also started on a rewrite of the Dairy Product Quality System. This system was a microcomputer system located in Wetaskiwin. The new system is being developed on the AS/400 and will provide access to the Regional Dairy Specialists.

Work continues on improving the the District Statistics Package (DSP). We have received many comments and we are currently making as many enhancements as possible.

The Mailing Label System development is in it's final stages and conversion of the Mainframe files is due to start in July. We will contact each user before any conversion of their individual files takes place. Discussions with some users has resulted in some minor enhancements of the system.

The Automatic Back-Up and Recovery system for the AS/400 is being tested at the J.G. O'Donoghue and O.S. Longman sites in Edmonton and, it is hoped, will be available at the other AS/400 sites by mid-July.

ED STIKSMA (STIKSMA AGEDM)

SOFTWARE COPYRIGHT



The following is an extract from a report prepared by the Government Information Security Advisory Committee, addressing issues relating to software and documentation copyright:

"It is the policy of the Government of Alberta to strictly adhere to computer software copyright protection regulations as specified in the Copyright Act. It is the responsibility of each Department to take appropriate precautions to guard against copyright infringement of any software product or associated documentation."

The Copyright Act was passed by Par-

liament significantly under the new Copyright Act. Fines of up to one million dollars and imprisonment are possible. Therefore, in addition to the extreme embarrassment which would befall an individual, or organization, caught breaking the law, there is now also the threat of severe financial punishment.

Recent articles in the press have highlighted moves by the Software Producers Association to vigorously enforce the provisions of the act, this has resulted in several prosecutions of persons for using illegally copied software. The Manitoba Government has suffered from the indignity of such a situation. In July, 1990, the offices of the Manitoba Government

in Winnipeg were raided by the RCMP acting on a complaint by the Software Producers Association, and a specific developer, who had become aware that an illegal copy of a software product was being stored and used on government equipment. The final legal outcome has not been determined in that case but charges were laid by the RCMP. Such actions could occur again. It is therefore important that all levels of the Alberta Government take adequate steps to ensure that it never happens here.

The Alberta Department of Agriculture policy statements on this subject are as follows:

"The Department adheres to the licensing agreements and copyright restrictions covering the use of computer software. The use, copying and distribution of software, by Departmental staff, in violation of these agreements or copyrights will not be tolerated."

"Responsibility, for all microcomputer software covered by a license agreement, is assigned to the end user/designated microcomputer custodian, who will sign all associated agreements and ensure adherence to the terms and conditions thereof."

TERRY LISTER (LISTER AGEDM)

ON THE LIGHTER SIDE

Three reporters met in a bar, each carrying an article that they were to give to their respective sub-editors, whose surnames were Gains, Marks and Falls. "Look!" said the reporter, whose sub-editor's name was Gains, "Each of our articles has in it's headline the name of one of the sub-editors, other than the one for whom it is intended".

They examined the articles the titles of which were:

BIG GAINS IN SCHOOL ACHIEVMENT

CRIME FALLS IN CITY PROJECT AREA

EVALUATION MARKS PROGRESS IN FIGHT AGAINST DISEASE AMONG HEALTH PROGRAM PARTICIPANTS

"That's amazing!" exclaimed the writer of the health program article.

Which sub-editor was to receive which article?

Answer to last issue's problem:

HOUSE NUMBERS

liament in February, 1988. This act provides protection to computer software and associated documentation by defining them as literary works. Copyright gives the creator of a work the exclusive right to reproduction and translations of that work.

The Author, or the person or organization to which the copyright is transferred, has the right to decide how copies may be distributed and to set a fee for each occurrence of distribution. Copyright holders for software which is sold at retail establishments, will clearly indicate what the rules are that they set for each occurrence of distribution. Any other method of distribution is likely in conflict with the copyright law and may be punishable.

The penalty for breaking the copyright law relative to computer software has

LEARNING RESOURCE CENTRE



In 1990 the Government's Interdepartmental Advisory Committee on the Management of Information and Technology Training, identified the need for an integrated, centrally located, facility to provide extensive microcomputer office automation classroom and self-study training. From the need the "Learning

Resource Centre" (LRC) concept v developed and a competitive bidding p. cess was set up to select the most suitable vendor to provide the service.

The successful vendor was Computerland who will provide a full LRC in Edmonton together with an extension office in Calgary.

Some of the benefits to be gained from the LRC concept are as follows:

- Reduced waiting time for courses.
- A central easily accessible location.
- One standard price of \$99.00 per student per day for all courses.
- Stability and continuity (the current contract is for two years).
- A significant increase in the number of available courses.
- The ability to provide specialty courses as required.
- Regularly scheduled courses both in Edmonton and Calgary.
- Classroom and one-on-one customized management training.
- Courses can be customized to fit a particular Department or environment.
- Regional training anywhere in Alberta at the lowest possible cost.
- A wide range of self-study courses, and media such as Interactive Video - Instruction (IVI), Computer Based Training (CBT) and video tapes.
- No-charge "Hot-Line" after course support.
- Money back guarantees for most courses.
- No-charge use of computer knowledge testing systems.
- Software evaluation help and advice.

The LRC supports Government-wide strategic Information Technology training initiatives by reducing the cost of training to departments and by improving the overall availability, quality and timeliness of training.

For more information on the LRC please contact one of the following at 427-7622, APWSS, Systems Management and Coordination Branch, Training Section:

- Vallon Wolaniuk
- Ann Olsthoom
- Shirene Kobewka
- Angela Yeung

TERRY LISTER (LISTER AGEDM)

AS/400 SECURITY



have been asked to write this article explaining the difference between "system" security and "application" security on the AS/400.

We generally think of computer security as a necessity to keep "unwanted" users out of the computer system; however, good system security does this and also prevents against "accidents" by authorized users. Good security is also required on a computer system to ensure that the data we are collecting and storing maintains its integrity.

The AS/400 system security is established and maintained by staff within Systems Development. There are many different measures which we use to maintain the current level of security, some of which are:

- All AS/400 CPU units are stored in a separate room which is only accessible by Systems Development staff.
- A backup of all data is stored on tape daily and the tapes are shipped off-site for storage.
- All user ID's are assigned by Systems Development. Only authorized users can access the system.
- Passwords expire every 60 days to ensure that users change their password frequently.
- The number of times a user can attempt to sign on with an invalid password is limited. The terminal will become unusable after a number of attempts which will deter users attempting to gain access without knowledge of a correct User ID and password.
- Daily reports are produced which list security violations such as unauthorized users attempting to sign on, these reports are reviewed by the Security officer.
- User ID's are established with the amount of authority required to perform their tasks on the system. Only users who require special authority are assigned it.

Another side to security on the AS/400 is Application security. Application security refers to security which is established by the analyst(s), based on the users requirements, when the application is developed. The first level of application security allows only authorized users access to an application. For example, an application developed for use only by Financial Services would disallow any other users access. Within an application you can incorporate many different levels of security, some common ones include:

- to allow some users to change records within a file and other users only access to read records
- to allow some users to see some fields

on a file but not particularly sensitive fields (eg. salary information)

- to allow only a select group of users to delete records within a file

The list of security measures which can be incorporated into an application is unlimited, it is all controlled by the programs within an application.

I hope this clears up some questions regarding security on the AS/400, if you have any questions please contact

JANET MACGILLIVRAY (MACGILL AGEDM)

AS/400 MAIL WAITING



An initial program has been set up that will run as you sign on to the AS/400 system. This program will determine if there is any outstanding mail waiting, that you have not reviewed. If there is, a message will be placed in your user profile message queue indicating the number of pieces of new mail waiting for you to review.

To access the user profile message queue, use the command MSG, which will place you in the device message queue (if there are any messages in this queue) and then press enter to proceed to the user profile message queue.

If there are no messages in the device message queue you will be placed directly into the user profile message queue. Please note that the name of the message queue is displayed in the upper left corner of the screen.

If you have any question about, or concerns with any of this, contact:

DOUG HILL (HILLD AGEDM)

AS/400 NEW DATA DISTRIBUTION FUNCTION



A new function has been added to the AS/400 Data Distribution Menu. This new function can be used to distribute a PC file to a APWSS user. You can access this function from the Data Distribution Menu using Option 4. Then fill in the required information, press enter, and your PC file will be sent to an APWSS user through the AS/400 network. Your file can then be received by doing a Receive command.

You will receive a message in your user profile message queue informing you if the send was successful or not.

If you have any question about, or concerns with any of this, contact.

DOUG HILL (HILLD AGEDM)

BULLETIN BOARD

ANNOUNCEMENT



n April 19, 1991 to Rita and Adrian MacDonald, a daughter Kira Leigh, sister to Erin Marie. Congratulations!

SAS NEWS ITEMS



Recent articles in the I.S.D. Newsletter.

- SAS/OS2 vs WINDOWS. Operating system comparison (March 91).

- SAS/PC Usage Notes and Zaps (April 91).

These are a collection of facts about the SAS system. They include useful information about hardware and system configuration as well as general hints about using the SAS system. When you have a problem, your first step should be to consult these Usage Notes. If you cannot find help there, consult SAS support. The Usage Notes are on a (large!) SAS dataset on disk, or in hardcopy form (800K of text). Either may be obtained by contacting SAS support at 427-2101.

- SAS/PC Graph with HP Laserjet III (May 91).

Interfacing this device as a special device driver entry.

- SAS/PC using Macros (May 91).

Macro facility allows more control over conventional SAS programming, a reduced amount of coding and conditional processing of DATA and PROC steps.

Maps from SAS/GRAPH

- A set of maps is now available on the LAN in the workroom. They include world and continental maps as well as most countries at a higher resolution than that available in Freelance. These maps may be imported into Freelance and are located in G:\CGMMAPS on the LAN.

Upcoming Events:

- 2nd Annual All-Alberta Applied Statistics and Biometrics Workshop.

October 21-22 at the Chateau Lacombe, Edmonton. A program of speakers and sessions will be available in early July.

- SUGI 17, April 12-15, 1992 in HONOLULU.

This is the annual SAS International Users Group conference (for those with the necessary and sufficient travel budget!). For more information contact:

KEITH TOOGOOD (TOOGOOD AGEDM)

PRODUCT ANNOUNCEMENTS



The following are details of upgrades and product availability:

1. Freelance Graphics, Version 4.0 is now available from SoftwareHouse West. Prices as follows:

Upgrades from Freelance Plus \$ 90.00.

New Package \$350.00.

2. IBM DOS Version 5.0 is now available from Computerland. Prices as follows:

Upgrade from IBM DOS 4.1 \$ 77.00

New Package \$120.00

3. Lotus 1-2-3, Version 2.3, This can be purchased through a Service Request Systems Development. Prices are as follows:

Upgrade from earlier versions \$125.00

New package \$370.00

4. The following Laser Printer toner cartridges can be purchased from Western Data Products Ltd. using the Standing Offer Order Form (AFIS 262). Prices as follows:

For HP Laserjet IIP \$ 78.80

For HP Laserjet Series II and III \$ 87.40

For IBM 4019 (10,000 copies) \$147.80

For IBM 4019 (15,000 copies) \$199.20

For further details contact:

PETER HESKETH (HESKETH AGEDM)

HARDWARE & SOFTWARE CATALOG



It is hoped to have the 1991/92 version of the Standard AIP Hardware and Software Catalog available by the end of July. This will now be available on the AS/400 through the "General Application" option on the main menu, and in hardcopy.